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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,741	09/19/2003	Yiqing Liang	1617880-0002 CON	6058

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WHITE & CASE LLP
PATENT DEPARTMENT
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NEW YORK, NY 10036

EXAMINER

AZARIAN, SEYED H

ART UNIT PAPER NUMBER

2624

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Supplemental
Notice of Allowability**

Application No.

10/666,741

Examiner

Seyed Azarian

Applicant(s)

LIANG ET AL.

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to fax inquiry filed 1/10/2006.
2. ☒ The allowed claim(s) is/are 43-51 and 53-80 now renumbered as 1-37.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Applicants Attorney (Wendi R. Schepler, Reg No. 43,091), on January 10, 2006, without traverse.
3. **The application has amended as follows: attach paper**

In the claims

REASONS FOR ALLOWANCE

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/15/2005 has been entered.

5. The following is an examiner's statement of reasons for allowance.

Based on telephone interview and fax inquiry, filed 1/10/2006, see page 11 through page 20, of the remarks, with respect to claims 43-51 and 53-80 have been fully considered and are persuasive and upon further consideration the 103(a) art rejection of claims 43-51 and 53-80, has been withdrawn.

6. Claims 43-51 and 53-80 now renumbered as 1-37 is allowed.

Based on applicant's amendment, claim 43 representing claims 51,64 and 75, the closest prior art of record (Maki and Fowler) references do not disclose or suggest, among other things, "third module is configured using the plurality of shape and posture categories and standard object behaviors, and is further configured to analyze temporal ordering of behavior primitives using time-series analysis to identify a transition from a previous behavior primitive to a next behavior primitive.

These key features in combination with the other features of the claimed invention are neither taught nor suggested by (Maki and Fowler) prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Azarian whose telephone number is (571) 272-7443. The examiner can normally be reached on Monday through Thursday from 6:00 a.m. to 7:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached at (571) 272-7443. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR.

Status information about the PAIR system, see [http:// pair-direct.uspto.gov](http://pair-direct.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Seyed Azarian
Patent Examiner
Group Art Unit 2627
January 17, 2006


KANJIBHAI PATEL
PRIMARY EXAMINER

43. (currently amended) A device comprising:

a first module configured to receive video images and to identify objects of interest in response to the video images;

a second module coupled to the first module and configured to classify a plurality of shape and posture categories based on a plurality of observed states of the objects of interest; and

a third module coupled to the second module, wherein the third module is configured to identify behaviors of the objects of interest using the plurality of shape and posture categories and standard object behaviors, and is further configured to analyze temporal ordering of behavior primitives using time-series analysis to identify a transition from a previous behavior primitive to a next behavior primitive.

51. (currently amended) A method of characterizing an activity comprising:

obtaining a stream of video image frames from a monitoring device;

identifying objects of interest from the stream of video image frames;

providing feature information of the objects of interest in response to the stream of video image frames;

classifying postures of the objects of interest in response to the feature information;

obtaining standard object behaviors from a storage memory device; and
characterizing behaviors of the objects of interest in response to a comparison between
the postures of the objects of interest and the standard object behaviors, wherein
the characterizing the behaviors of the objects of interest further includes
analyzing temporal ordering of behavior primitives using time-series analysis to
identify a transition from a previous behavior primitive to a next behavior
primitive.

52. (currently canceled)

53. (currently amended) the method of claim ^[52] 51 wherein the time-series analysis further includes employing Hidden Markov Models (HMMs).